



AMP & ELCON Power Connector Layout Forms

RoHS
Ready 

 **Tyco Electronics**
Our commitment. Your advantage.

Table of Contents

Disclaimer

While Tyco Electronics Corporation and its affiliates referenced herein ("Tyco Electronics") have made every reasonable effort to ensure the accuracy of the information in this catalog, Tyco Electronics does not guarantee that it is error-free, nor does Tyco Electronics make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current.

Tyco Electronics reserves the right to make any adjustments to the information contained herein at any time without notice. Tyco Electronics expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. Tyco Electronics' only obligations are those in the Tyco Electronics Standard Terms and Conditions of Sale, and in no case will Tyco Electronics be responsible for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of its products. Users should independently evaluate the suitability of, and test each product for, their application.

The dimensions, specifications, designs, construction, materials and processes in this catalog are for reference purposes only and are subject to change without notice. Please consult Tyco Electronics for the most current product information.

The export of certain Tyco Electronics products is restricted by the Arms Export Control Act (Title 22, U.S.C. Sec 2751, et seq.) or the Export Administration Act of 1979, as amended (Title 50, U.S.C., App. 2401 et seq.). Orders may be subject to export approval by the U.S. Government. Buyer must comply with all applicable export laws of all applicable jurisdictions.

© Copyright 2007, 2006, and 2005 by Tyco Electronics Corporation. All International Rights Reserved.

AMP, ELCON, FLATPAQ, MINIPAK, MULTI-BEAM XL, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Other products, logos, and company names mentioned herein may be trademarks of their respective owners.

MULTI-BEAM XL Custom Connector Worksheet	3
MINIPAK Custom Connector Worksheet	4
FLATPAQ Connector Layout Form	5
Mini Drawer Connector Pin Side Layout Form	6
Mini Drawer Connector Socket Side Layout Form	7
Lower Drawer Connector Pin Side Layout Form	8
Lower Drawer Connector Socket Side Layout Form	9
75A Middle Drawer Connector Pin Side Layout Form	10
75A Middle Drawer Connector Socket Side Layout Form	11
125A Middle Drawer Connector Pin Side Layout Form	12
125A Middle Drawer Connector Socket Side Layout Form	13
200A Middle Drawer Connector Pin Side Layout Form	14
200A Middle Drawer Connector Socket Side Layout Form	15
Square Drawer Connector Pin Side Layout Form	16
Square Drawer Connector Socket Side Layout Form	17
Top Drawer Connector Pin Side Layout Form	18
Top Drawer Connector Socket Side Layout Form	19
Double Drawer Connector Pin Side Layout Form	20
Double Drawer Connector Socket Side Layout Form	21
DualPower Drawer Connector Pin Side Layout Form	22
DualPower Drawer Connector Socket Side Layout Form	23
QuadPower Drawer Connector Pin Side Layout Form	24
QuadPower Drawer Connector Socket Side Layout Form	25
In-Line QuadPower Drawer Connector Pin Side Layout Form	26
In-Line QuadPower Drawer Connector Socket Side Layout Form	27
W5 Power Drawer Connector Pin Side Layout Form	28
W5 Power Drawer Connector Socket Side Layout Form	29
HV8P Drawer Connector Pin Side Layout Form	30
HV8P Drawer Connector Socket Side Layout Form	31
P10S0 Drawer Connector Pin Side Layout Form	32
P10S0 Drawer Connector Socket Side Layout Form	33
P10S22 Drawer Connector Pin Side Layout Form	34
P10S22 Drawer Connector Socket Side Layout Form	35
P12S12 Drawer Connector Pin Side Layout Form	36
P12S12 Drawer Connector Socket Side Layout Form	37
P0S30 Drawer Connector Pin Side Layout Form	38
P0S30 Drawer Connector Socket Side Layout Form	39

Restriction on the use of Hazardous Substances (RoHS)

At Tyco Electronics, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

RoHS Compliant — Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

Getting the Information You Need

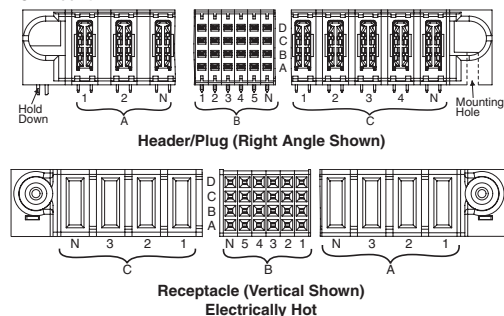
Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we've got the answers at www.tycoelectronics.com/leadfree

**RoHS
Customer
Support
Center**

MULTI-BEAM XL Custom Connector Worksheet

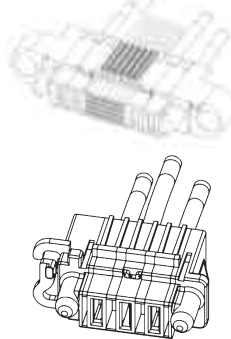
PCB Mount



Cable Mount

XYZ Floating

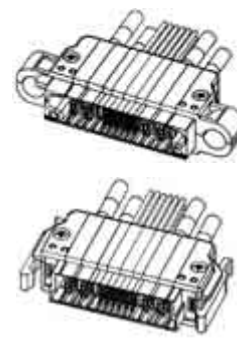
Slide-to-Lock



Plugs

XYZ Floating

Squeeze-to-Release



To create a unique configuration for MULTI-BEAM XL Connectors simply complete this worksheet and forward it to your Tyco Electronics sales engineer.

1. Application	☐ Board-to-Board	☐ Cable-to-Board
2. Gender	☐ Plug (Male)	☐ Receptacle (Female)
3. Orientation	Cable Only → ☐ Blind Mate specify Floating or Slide-to-Lock receptacle ☐ Latching PCB Only → ☐ Right Angle ☐ Vertical	
4. Termination (Cable Only)	Power ☐ 8 AWG ☐ 10 AWG ☐ 12 AWG ☐ 14 AWG Signal ☐ 22 AWG ☐ 24 AWG ☐ 26 AWG	
5. Termination Style (PCB Only)	☐ Solder tail .135" [3.43mm] ☐ Press-Fit .120" [3.05mm] ☐ Solder tail .165" [4.19mm] ☐ Press-Fit .135" [3.43mm] ☐ Press-Fit .165" [4.19mm]	
6. Mounting to PCB	☐ Hold Downs (one on either end) ☐ .122" [3.10mm] Mounting holes (Accepts #4 screws, right angle connectors only) ☐ .150" [3.81mm] Mounting holes (Accepts #6 screws, right angle connectors only)	
7. Select # of Contacts	Section A: (Power Contacts) ☐ Enter # of Power Contacts (Loaded with standard length Power Contacts) ☐ Enter the position(s) to be loaded with Pre-mate contact (Receptacles only) (Mate-First-Break-Last) (i.e. #1,#3, etc.) Contact Centerline Spacings: ☐ .200" [5.08mm] (HDP) ☐ .250" [6.35mm] (P) ☐ .300" [7.62mm](ACP) Section B: (Signal Contacts) ☐ Enter # of Signal Contacts (Multiples of 8 are standard, i.e. 16, 24, 32...) ☐ Enter the Positions with Post-Mate Contacts (Mate-Last-Break-First, Plugs only) Note: Row A is standard (i.e. A1, A3, etc.) Section C: (Power Contacts) ☐ Enter # of Power Contacts (Loaded with standard length Power Contacts) ☐ Enter the positions to be loaded with Pre-Mate Contacts (Receptacles only) (Mate-First-Break-Last, i.e. #1, #3, etc.) Contact Centerline Spacings: ☐ .200" [5.08mm] (HDP) ☐ .250" [6.35mm] (P) ☐ .300" [7.62mm] (ACP)	

8. Additional Requirements

9. Customer Information

Name: _____ Company: _____ Location: _____
Phone: _____ Fax: _____ e-mail: _____

(Submit to your local Tyco Electronics Sales Engineer)

AMP, ELCON, MULTI-BEAM XL, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

MINIPAK Custom Connector Worksheet

MINIPAK Connector

- Enter your information in the table to the right.
- Specify the design requirements for your MINIPAK Connector configuration in steps 1 through 5 shown below.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Tyco Electronics will recommend a MINIPAK Connector configuration based on the specified requirements and issue a Customer Drawing for your approval.

This drawing will have a unique Part Number specific to your configuration, which you should reference whenever you make an inquiry or place an order.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

1. AC INPUT

- ☐ No AC input required ☐ 125 VAC spacing ☐ 250 VAC spacing

2. SIGNAL CONTACTS

- ☐ No signal contacts required ☐ 6 contacts ☐ 24 contacts ☐ 30 contacts ☐ Other: _____
- ☐ Signal sequencing required (two pin lengths available; write requirements under NOTES below.)

3. DC INPUT/OUTPUT

Write the current, voltage and sequencing requirements for each of the DC lines required by your application. Tyco Electronics will use this information to configure the DC side of your MINIPAK Connector with the appropriate number of contacts and contact spacing.

DC Requirements								
	DC1	DC2	DC3	DC4	DC5	DC6	DC7	DC8
Current (A)								
Voltage (V)								
Blade Length	Standard							
	Premate							

4. BOARD MOUNTING STYLE

Straight Socket (choose one)

- ☐ Short solder tail (.062" thick boards)
- ☐ Long solder tail (.093/.125" thick boards)
- ☐ Compliant press-fit tails (.093" min. thick board recommended)

Right Angle Blade (choose one)

- ☐ Short solder tail (for .062" thick boards)
- ☐ Long solder tail (.093/.125" thick boards)

5. OTHER REQUIREMENTS

- ☐ Alignment guides required
- ☐ Connector length restriction, if any: _____ " (_____ mm)

For further clarity, you can attach a sketch to this form if necessary.

- ☐ Sketch attached: _____ pages

NOTES:

AMP, ELCON, MINIPAK, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

FLATPAQ Connector Layout Form

Instructions

1. Indicate the connector layout by filling in the FP number of each module required in the boxes, one per box. Use one form per mated pair.
2. Left to right order of the modules should match **mating face views** of the connector. **When laying out right angle assemblies**, make sure you look at the mating face with the termination tails facing downwards.
3. **For solder terminated assemblies**, indicate the tail length for each half of the connector using the checkboxes to the right of the layout grid.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Upon receipt of this form, Tyco Electronics will generate a Customer Drawing for you to check and approve prior to connector production.

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user:)	
Signature	Today's Date
Annual Quantity Required	

Write the "FP" numbers to indicate the layout of one half of the connector assembly, matching the left to right order with the mating face view of the connector (right angle assembly tails facing downwards).

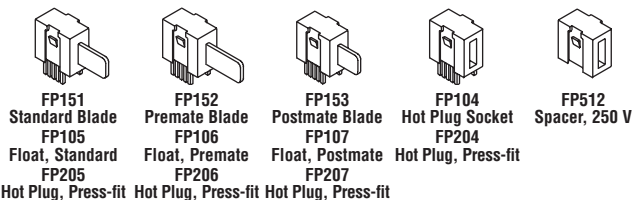
FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	Solder Tail Options ☐ .115" (2.9 mm); .062" thick boards ☐ .177" (4.5 mm); .093/.125" boards

Write the "FP" numbers to indicate the layout of the mate of the above assembly, matching the left to right order with the mating face view of the connector (right angle assembly tails facing downwards).

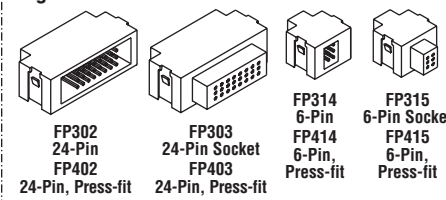
FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	FP	Solder Tail Options ☐ .115" (2.9 mm); .062" thick boards ☐ .177" (4.5 mm); .093/.125" boards

Right Angle Mount

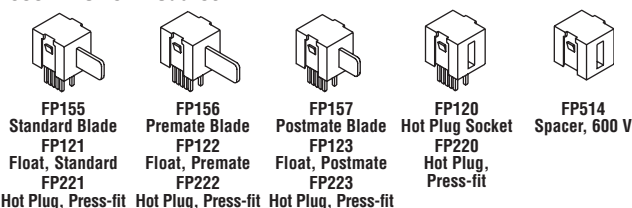
250 V Power Modules



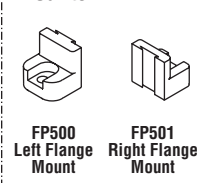
Signal Modules



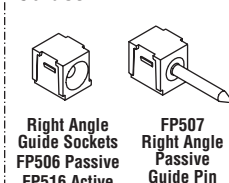
600 V Power Modules



Mounts

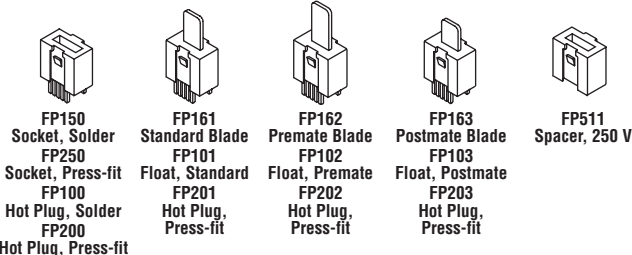


Guides

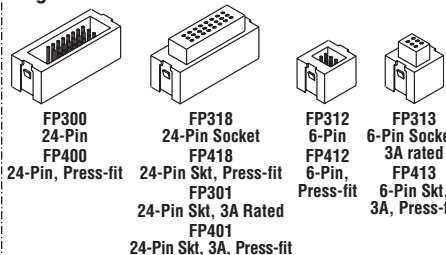


Straight Mount

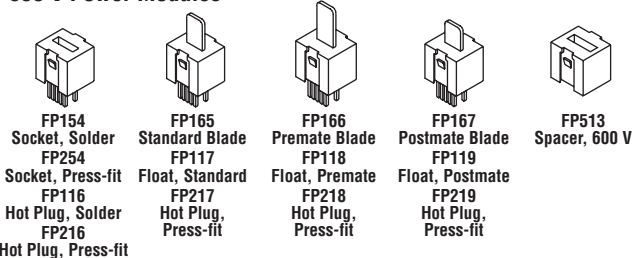
250 V Power Modules



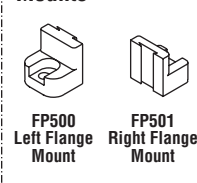
Signal Modules



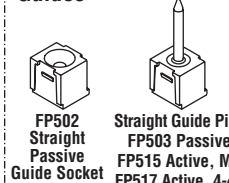
600 V Power Modules



Mounts



Guides



Note: All modules are solder tail termination unless indicated as compliant Press-fit. Select solder tail length using check boxes to the right of the connector layout grid above. 0.093" or thicker boards are recommended for compliant Press-fit termination style. Consult Tyco Electronics for signal module sequencing. See Catalog 1773096 for benefits of Hot Plug and Float options.

AMP, ELCON, FLATPAQ, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Mini Drawer Connector Pin Side Layout Form

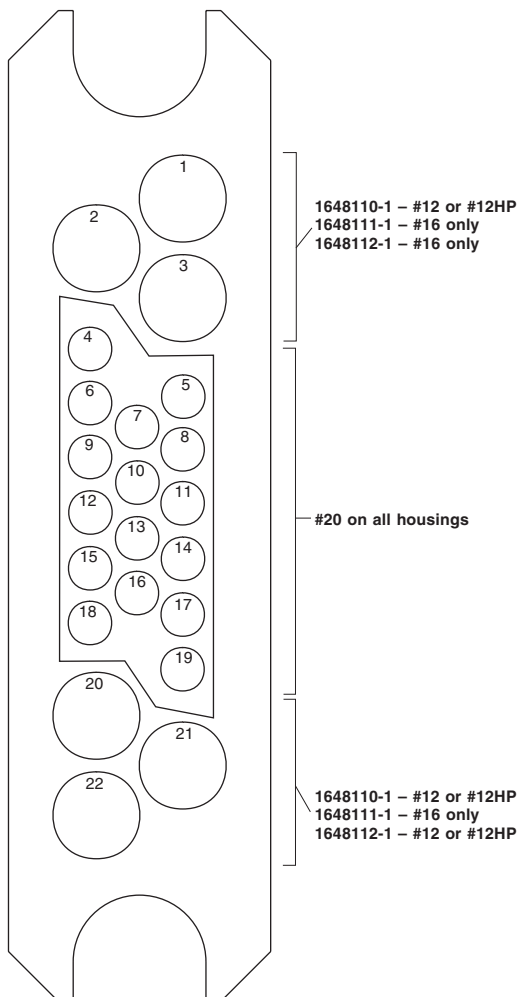
Pin Assembly

1. Choose one housing from the **Pin Housing Selection Menu** table.
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired PCB tail contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 premate PCB tail contact to be installed in contact position #10, write "E" in circle #10.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

Pin Housing Selection Menu		Check One
Part Number	Description	
1648110-1	#12, #20, #12 Pin Housing, Float or Fixed Mounting	
1648111-1	#16, #20, #16 Pin Housing, Float or Fixed Mounting	
1648112-1	#16, #20, #12 Pin Housing, Float or Fixed Mounting	

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1650155-1	Crimp, standard	
	B =	1650161-1	Crimp, premate	
	C =	1650162-2	Crimp, postmate	
	D =	1650283-1	PCB tail, standard	
	E =	1650065-1	PCB tail, premate	
	F =	1650226-1	PCB tail, postmate	
#16	G =	1766194-1	Crimp, standard	
	H =	1766198-1	Crimp, premate	
	J =	1766199-1	Crimp, postmate	
	K =	1766222-1	PCB tail, standard	
	L =	1766223-1	PCB tail, premate	
	M =	1766818-1	PCB tail, postmate	
#12	N =	1766193-1	Crimp, standard	
	P =	1766195-1	Crimp, premate	
	Q =	1766196-1	Crimp, postmate	
	R =	1766245-1	PCB tail, standard	
	S =	1766250-1	PCB tail, premate	
	T =	1766249-1	PCB tail, postmate	
#12 Hot Plug	U =	1650153-2	Crimp, standard, Hot Plug	
	V =	1650156-2	Crimp, premate, Hot Plug	
	W =	1650060-2	PCB tail, standard, Hot Plug	
	X =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Mini Drawer Connector Socket Side Layout Form

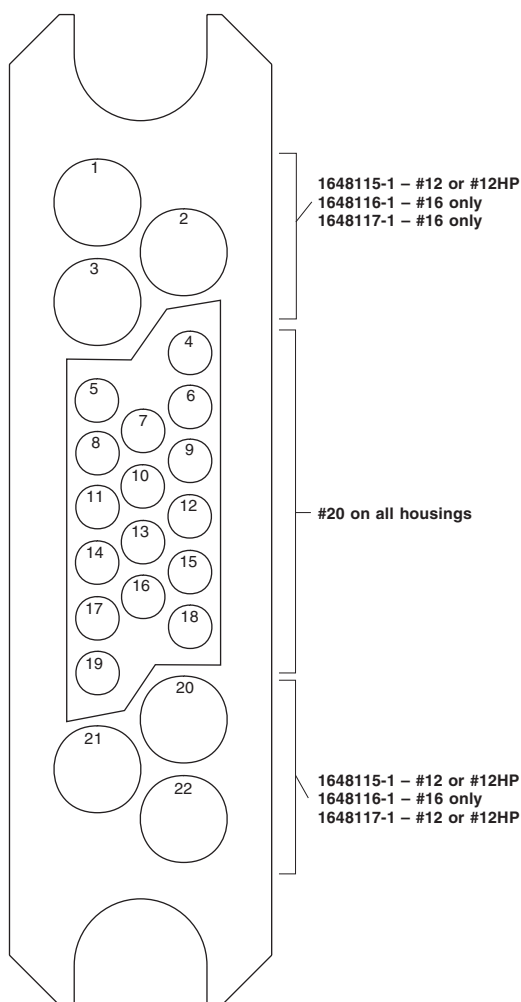
Socket Assembly

- Choose one housing from the **Socket Housing Selection Menu** table.
- Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired PCB tail contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 PCB tail contact to be installed in contact position #8, write "C" in circle #8.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



Socket Housing Selection Menu		Check One
Part Number	Description	
1648115-1	#12, #20, #12 Socket Housing, Float or Fixed Mounting	
1648116-1	#16, #20, #16 Socket Housing, Float or Fixed Mounting	
1648117-1	#16, #20, #12 Socket Housing, Float or Fixed Mounting	

Socket Contact Selection Menu				
Size	Ref.	Part Number	Termination Style	Qty.
#20	A =	1648325-1	Crimp	
	B =	6648301-1	Compliant Press-fit	
	C =	1648382-1	PCB Tail	
#16	D =	6648319-1	Crimp	
	E =	6648306-1	Compliant Press-fit	
	F =	6648383-1	PCB Tail	
#12	G =	6648318-1	Crimp	
	H =	6648304-1	Compliant Press-fit	
	J =	6648374-1	PCB Tail	
#12 Hot Plug	K =	1648384-1	Crimp, Hot Plug	
	L =	6648305-1	Compliant Press-fit, Hot Plug	
	M =	1648387-1	PCB Tail, Hot Plug	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Lower Drawer Connector Pin Side Layout Form

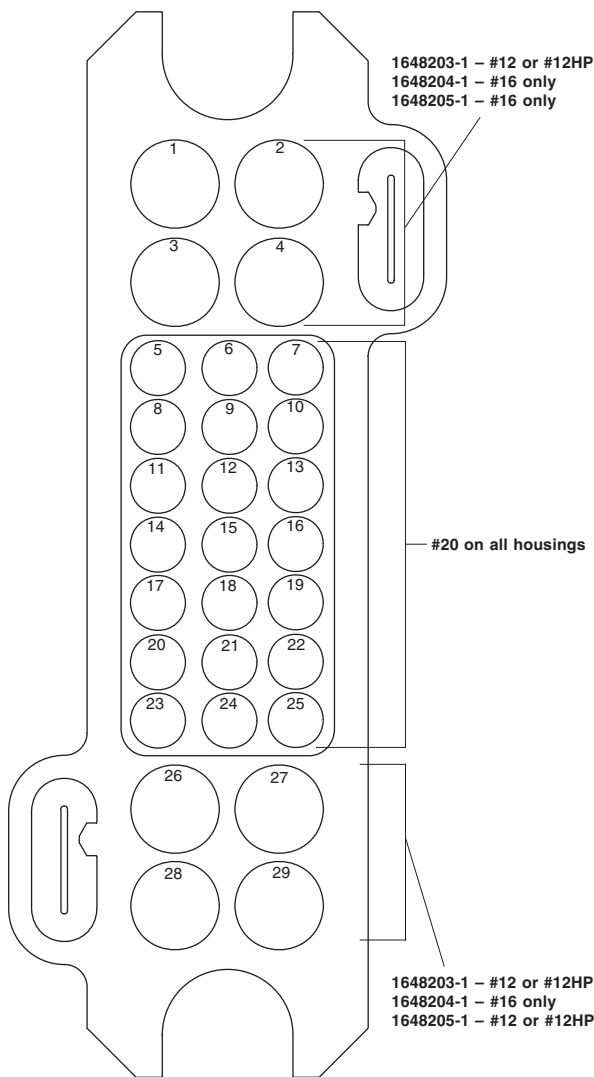
Pin Assembly

- Choose one housing from the **Pin Housing Selection Menu** table.
- Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired PCB tail contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 premate PCB tail contact to be installed in contact position #10, write "E" in circle #10.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

Pin Housing Selection Menu		Check One
Part Number	Description	
1648203-1	#12, #20, #12 Pin Housing, Float or Fixed Mounting	
1648204-1	#16, #20, #16 Pin Housing, Float or Fixed Mounting	
1648205-1	#16, #20, #12 Pin Housing, Float or Fixed Mounting	

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1650155-1	Crimp, standard	
	B =	1650161-1	Crimp, premate	
	C =	1650162-2	Crimp, postmate	
	D =	1650283-1	PCB tail, standard	
	E =	1650065-1	PCB tail, premate	
	F =	1650226-1	PCB tail, postmate	
#16	G =	1766194-1	Crimp, standard	
	H =	1766198-1	Crimp, premate	
	J =	1766199-1	Crimp, postmate	
	K =	1766222-1	PCB tail, standard	
	L =	1766223-1	PCB tail, premate	
	M =	1766818-1	PCB tail, postmate	
#12	N =	1766193-1	Crimp, standard	
	P =	1766195-1	Crimp, premate	
	Q =	1766196-1	Crimp, postmate	
	R =	1766245-1	PCB tail, standard	
	S =	1766250-1	PCB tail, premate	
	T =	1766249-1	PCB tail, postmate	
#12 Hot Plug	U =	1650153-2	Crimp, standard, Hot Plug	
	V =	1650156-2	Crimp, premate, Hot Plug	
	W =	1650060-2	PCB tail, standard, Hot Plug	
	X =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Lower Drawer Connector Socket Side Layout Form

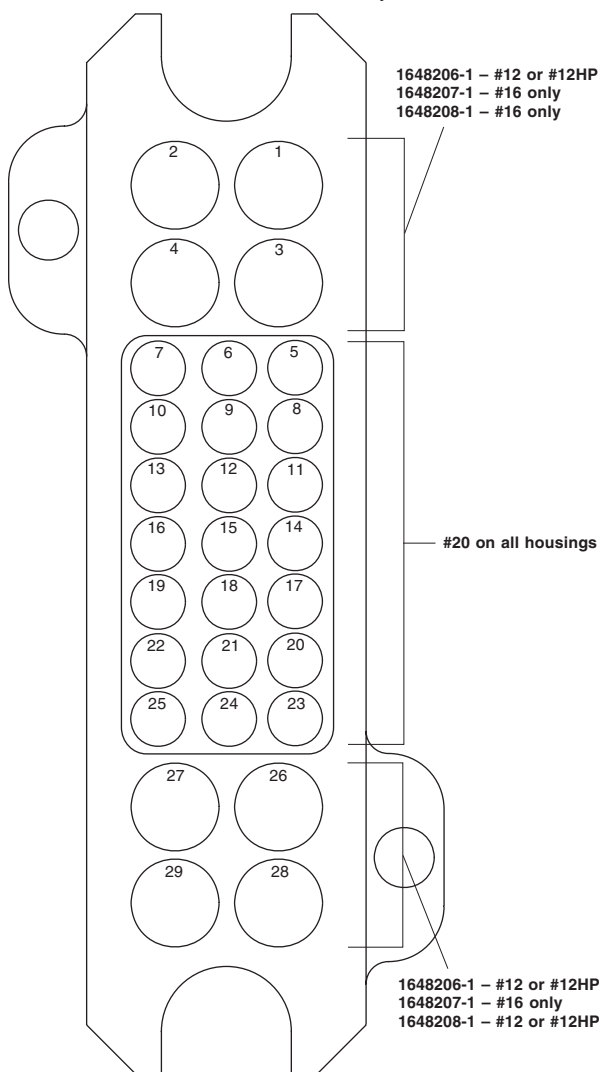
Socket Assembly

1. Choose one housing from the **Socket Housing Selection Menu** table.
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired PCB tail contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 PCB tail contact to be installed in contact position #8, write "C" in circle #8.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



Socket Housing Selection Menu			Check One
Part Number	Description		
1648206-1	#12, #20, #12 Socket Housing, Float or Fixed Mounting		
1648207-1	#16, #20, #16 Socket Housing, Float or Fixed Mounting		
1648208-1	#16, #20, #12 Socket Housing, Float or Fixed Mounting		

Socket Contact Selection Menu				
Size	Ref.	Part Number	Termination Style	Qty.
#20	A =	1648325-1	Crimp	
	B =	6648301-1	Compliant Press-fit	
	C =	1648382-1	PCB Tail	
#16	D =	6648319-1	Crimp	
	E =	6648306-1	Compliant Press-fit	
	F =	6648383-1	PCB Tail	
#12	G =	6648318-1	Crimp	
	H =	6648304-1	Compliant Press-fit	
	J =	6648374-1	PCB Tail	
#12 Hot Plug	K =	1648384-1	Crimp, Hot Plug	
	L =	6648305-1	Compliant Press-fit, Hot Plug	
	M =	1648387-1	PCB Tail, Hot Plug	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

75A Middle Drawer Connector Pin Side Layout Form

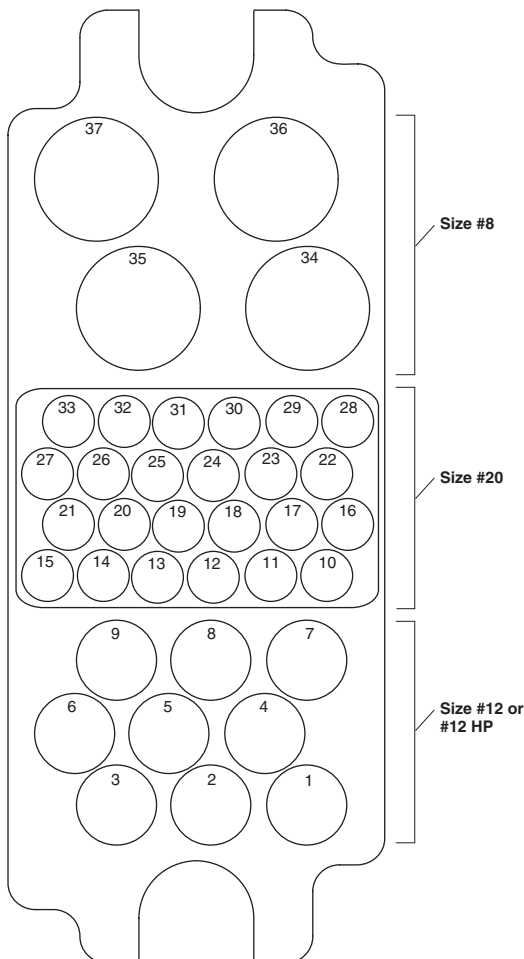
Pin Assembly

- Choose one housing from the **Pin Housing Selection Menu** table.
- Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired PCB tail contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 premate PCB tail contact to be installed in contact position #8, write "Q" in circle #8.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Pin Housing Selection Menu		Check One
Part Number	Description	
1648162-1	Float Mount for Crimp Contacts	
1648163-1	Flush PCB Mount for PCB Tail Contacts	

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#8	A =	1766192-1	Crimp, standard	
	B =	1766197-1	Crimp, premate	
	C =	1766262-1	PCB tail, standard	
	D =	1766263-1	PCB tail, premate	
#20	E =	1650155-1	Crimp, standard	
	F =	1650161-1	Crimp, premate	
	G =	1650162-2	Crimp, postmate	
	H =	1650283-1	PCB tail, standard	
	J =	1650065-1	PCB tail, premate	
	K =	1650226-1	PCB tail, postmate	
#12	L =	1766193-1	Crimp, standard	
	M =	1766195-1	Crimp, premate	
	N =	1766196-1	Crimp, postmate	
	P =	1766245-1	PCB tail, standard	
	Q =	1766250-1	PCB tail, premate	
	R =	1766249-1	PCB tail, postmate	
#12 Hot Plug	S =	1650153-2	Crimp, standard, Hot Plug	
	T =	1650156-2	Crimp, premate, Hot Plug	
	U =	1650060-2	PCB tail, standard, Hot Plug	
	V =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

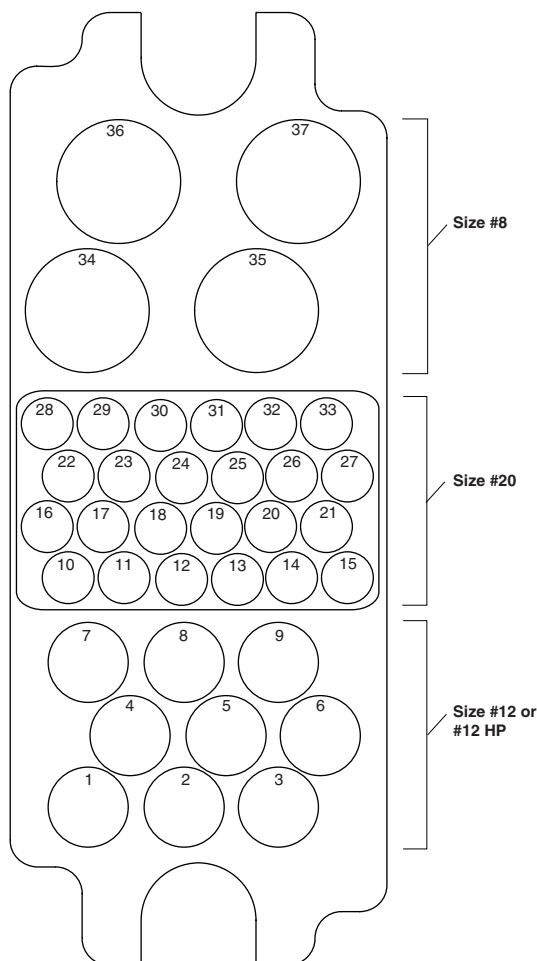
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

75A Middle Drawer Connector Socket Side Layout Form

Socket Assembly

1. Choose one housing from the **Socket Housing Selection Menu** table.
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #8, write "J" in circle #8.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Selection Menu		Check One
Part Number	Description	
6648167-1	Float Mount for Crimp Contacts	
1648168-1	PCB Mount for PCB Tail and Press-fit Contacts	

Socket Contact Selection Menu				
Size	Ref.	Part Number	Termination Style	Qty.
#8	A =	6648317-1	Crimp	
	B =	6648351-1	Knurled Press-fit	
	C =	6648400-1	PCB Tail	
#20	D =	1648325-1	Crimp	
	E =	6648294-1	Compliant Press-fit (Flush)	
	F =	1648382-1	PCB Tail	
#12	G =	6648318-1	Crimp	
	H =	6648304-1	Compliant Press-fit	
	J =	6648374-1	PCB Tail	
#12 Hot Plug	K =	1648384-1	Crimp, Hot Plug	
	L =	6648305-1	Compliant Press-fit, Hot Plug	
	M =	1648387-1	PCB Tail, Hot Plug	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

125A Middle Drawer Connector Pin Side Layout Form

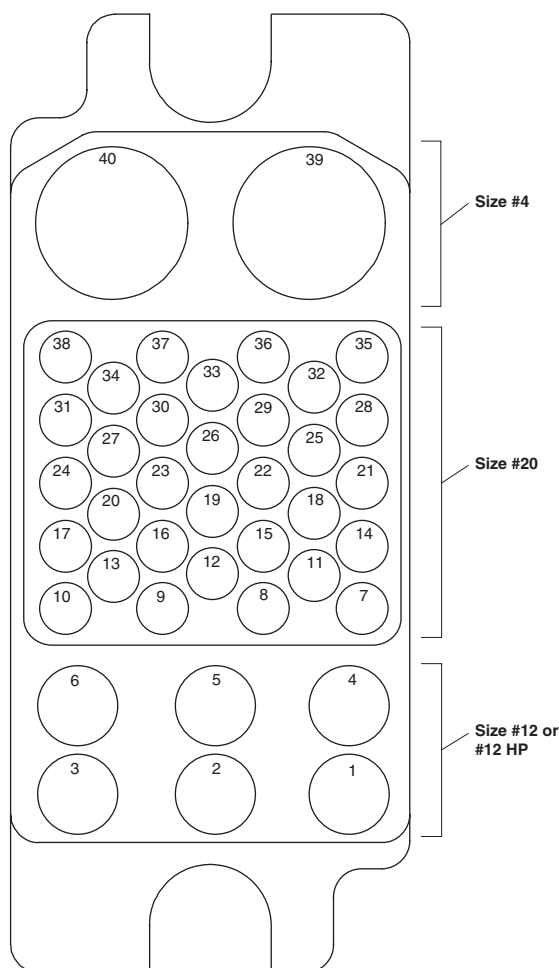
Pin Assembly

1. Choose one housing from the **Pin Housing Selection Menu** table.
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 premate PCB tail contact to be installed in contact position #4, write "Q" in circle #4.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Pin Housing Selection Menu		Check One
Part Number	Description	
1648151-1	Float Mount Pin Housing	
1648152-1	PCB Mount Pin Housing	

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#4	A =	1766232-1	Crimp, standard	
	B =	1766812-1	1/4-20 External Thread	
	C =	1766283-1	M5 Internal Thread	
#20	E =	1650155-1	Crimp, standard	
	F =	1650161-1	Crimp, premate	
	G =	1650162-2	Crimp, postmate	
	H =	1650283-1	PCB tail, standard	
	J =	1650065-1	PCB tail, premate	
	K =	1650226-1	PCB tail, postmate	
#12	L =	1766193-1	Crimp, standard	
	M =	1766195-1	Crimp, premate	
	N =	1766196-1	Crimp, postmate	
	P =	1766245-1	PCB tail, standard	
	Q =	1766250-1	PCB tail, premate	
	R =	1766249-1	PCB tail, postmate	
#12 Hot Plug	S =	1650153-2	Crimp, standard, Hot Plug	
	T =	1650156-2	Crimp, premate, Hot Plug	
	U =	1650060-2	PCB tail, standard, Hot Plug	
	V =	1650074-3	PCB tail, premate, Hot Plug	

Crimp and Threaded contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

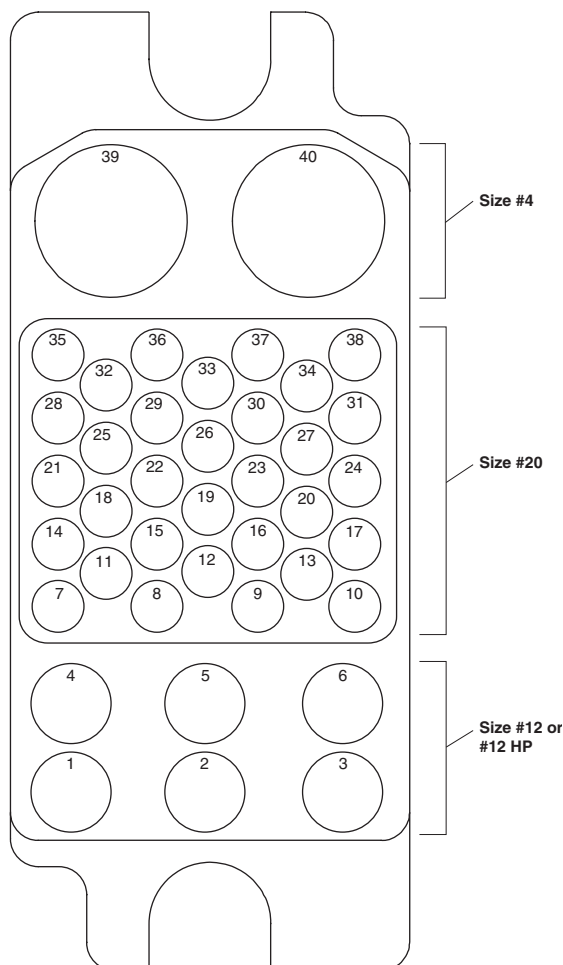
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

125A Middle Drawer Connector Socket Side Layout Form

Socket Assembly

1. Choose one housing from the **Socket Housing Selection Menu** table.
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #4, write "J" in circle #4.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Selection Menu

Part Number	Description	Check One
1648156-1	Float Mount for Crimp Contacts	
1648157-1	PCB Mount for PCB Tail and Press-fit Contacts	

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style	Qty.
#4	A =	6648434-1	Crimp	
	B =	6648435-1	1/4-20 External Thread	
	C =	6648335-1	M5 Internal Thread	
#20	D =	1648325-1	Crimp	
	E =	6648301-1	Compliant Press-fit	
	F =	1648382-1	PCB Tail	
#12	G =	6648318-1	Crimp	
	H =	6648304-1	Compliant Press-fit	
	J =	6648374-1	PCB Tail	
#12 Hot Plug	K =	1648384-1	Crimp, Hot Plug	
	L =	6648305-1	Compliant Press-fit, Hot Plug	
	M =	1648387-1	PCB Tail, Hot Plug	

Crimp and Threaded contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650106-1	Screw, No 6-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

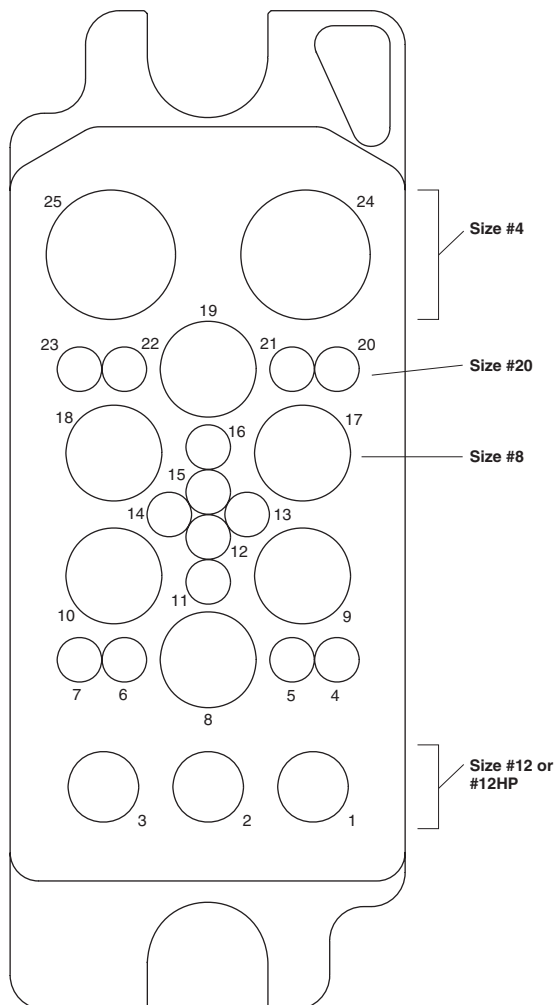
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

200A Middle Drawer Connector Pin Side Layout Form

Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #4 external thread contact to be installed in contact position #25, write "B" in circle #25.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Top Assembly Part Number
Assigned by Tyco Electronics

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Part Number

1648134-1

Pin Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#4	A =	1766232-1	Crimp, standard	
	B =	1766812-1	1/4-20 External Thread	
#8	C =	1766192-1	Crimp, standard	
	D =	1766197-1	Crimp, premate	
#20	E =	1650155-1	Crimp, standard	
	F =	1650161-1	Crimp, premate	
	G =	1650162-2	Crimp, postmate	
	H =	1650283-1	PCB tail, standard	
	J =	1650065-1	PCB tail, premate	
	K =	1650226-1	PCB tail, postmate	
#12	L =	1766193-1	Crimp, standard	
	M =	1766195-1	Crimp, premate	
	N =	1766196-1	Crimp, postmate	
	P =	1766245-1	PCB tail, standard	
	Q =	1766250-1	PCB tail, premate	
	R =	1766249-1	PCB tail, postmate	
#12 Hot Plug	S =	1650153-2	Crimp, standard, Hot Plug	
	T =	1650156-2	Crimp, premate, Hot Plug	
	U =	1650060-2	PCB tail, standard, Hot Plug	
	V =	1650074-3	PCB tail, premate, Hot Plug	

Crimp and Threaded contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

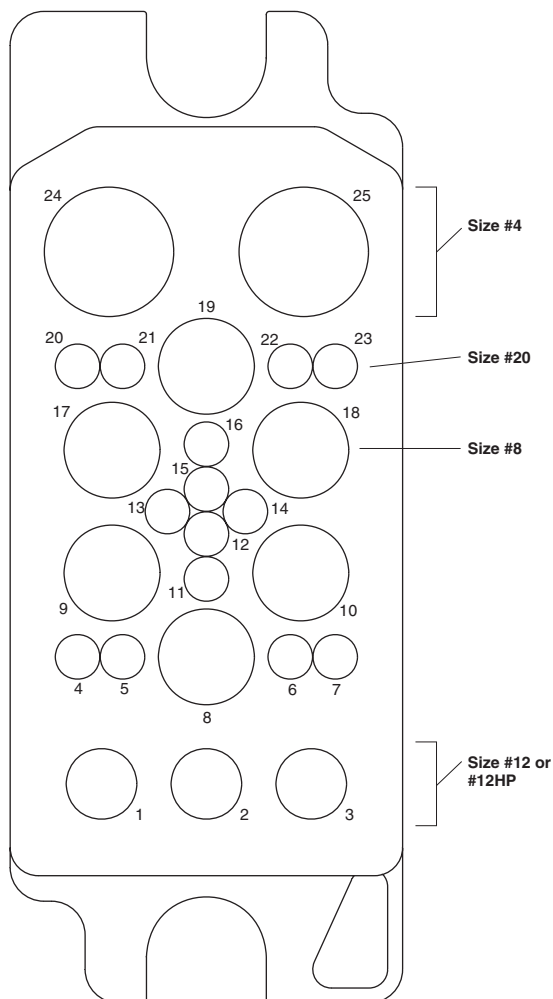
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

200A Middle Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #4 external thread contact to be installed in contact position #25, write "B" in circle #25.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

1648135-1

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#4	A =	6648434-1	Crimp	
	B =	6648435-1	1/4-20 External Thread	
#8	C =	6648317-1	Crimp	
	D =	6648400-1	PCB Tail	
#20	E =	1648325-1	Crimp	
	F =	1648382-1	PCB Tail	
#12	G =	6648318-1	Crimp	
	H =	6648374-1	PCB Tail	
#12 Hot Plug	J =	1648384-1	Crimp, Hot Plug	
	K =	1648387-1	PCB Tail, Hot Plug	

Crimp and Threaded contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Square Drawer Connector Pin Side Layout Form

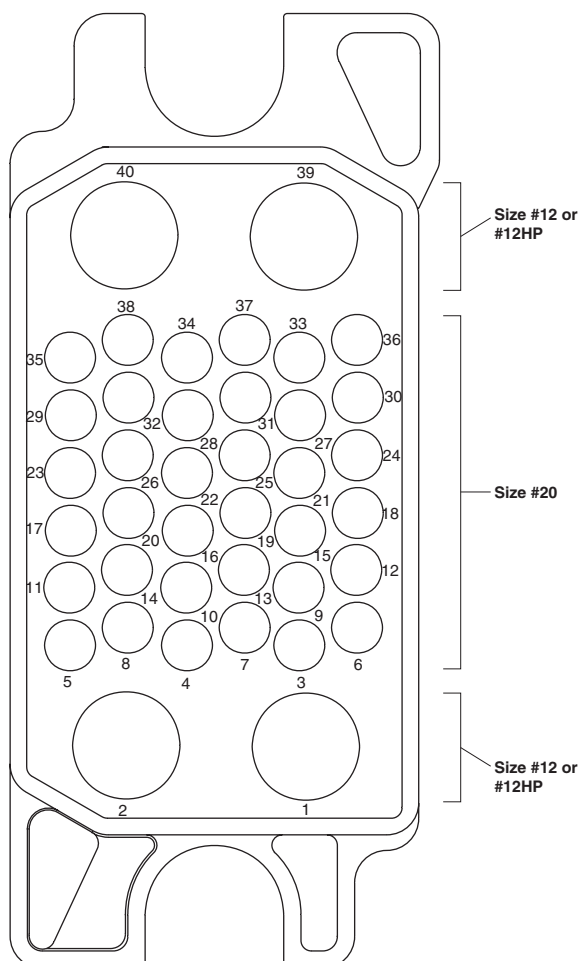
Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired PCB tail contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 standard PCB tail contact to be installed in contact position #1, write "K" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Pin Housing Part Number

1648132-1

Pin Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1650155-1	Crimp, standard	
	B =	1650161-1	Crimp, premate	
	C =	1650162-2	Crimp, postmate	
	D =	1650283-1	PCB tail, standard	
	E =	1650065-1	PCB tail, premate	
	F =	1650226-1	PCB tail, postmate	
#12	G =	1766193-1	Crimp, standard	
	H =	1766195-1	Crimp, premate	
	J =	1766196-1	Crimp, postmate	
	K =	1766245-1	PCB tail, standard	
	L =	1766250-1	PCB tail, premate	
	M =	1766249-1	PCB tail, postmate	
#12 Hot Plug	N =	1650153-2	Crimp, standard, Hot Plug	
	P =	1650156-2	Crimp, premate, Hot Plug	
	Q =	1650060-2	PCB tail, standard, Hot Plug	
	R =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

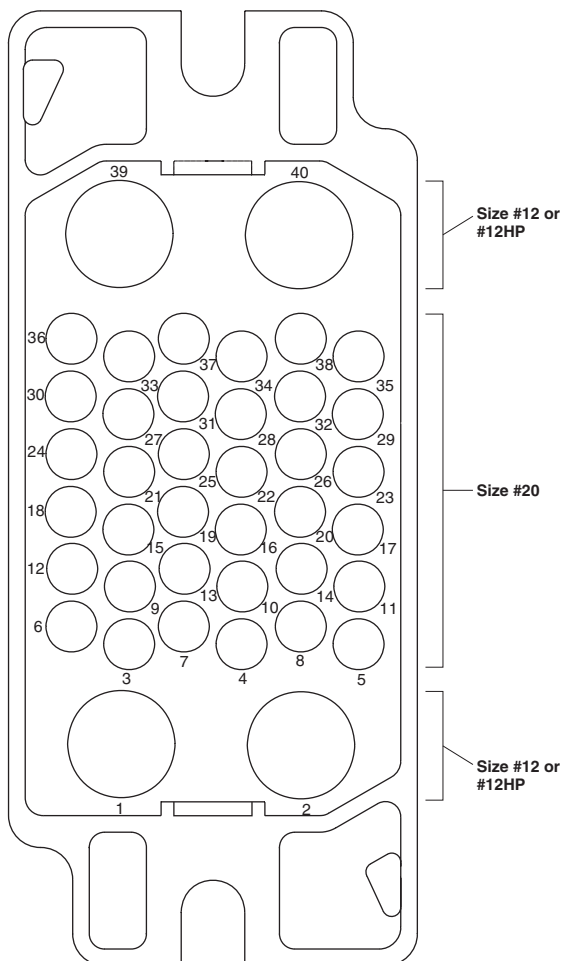
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Square Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #1, write "F" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

1648133-1 = Fixed Mount only

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1648325-1	Crimp	
	B =	6648301-1	Compliant Press-fit	
	C =	1648382-1	PCB Tail	
#12	D =	6648318-1	Crimp	
	E =	6648304-1	Compliant Press-fit	
	F =	6648374-1	PCB Tail	
#12 Hot Plug	G =	1648384-1	Crimp, Hot Plug	
	H =	6648305-1	Compliant Press-fit, Hot Plug	
	J =	1648387-1	PCB Tail, Hot Plug	

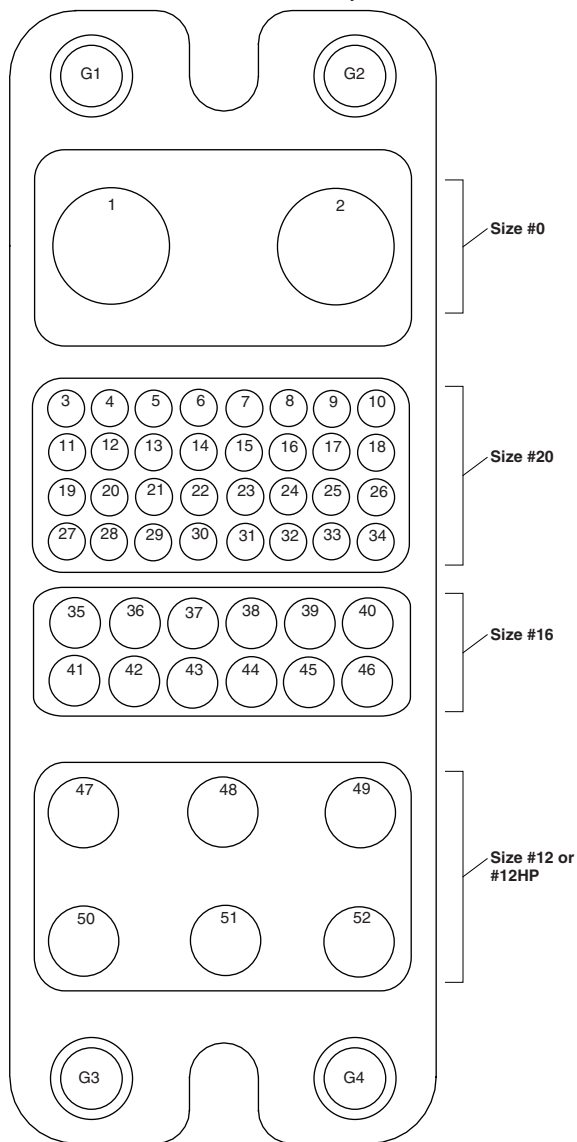
Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Top Drawer Connector Pin Side Layout Form

Pin Assembly

- Choose one housing from the **Pin Housing Selection Menu** table. Place an X in the appropriate guide pin circles, if guide pins are required.
- Write the total quantity of each pin contact you require for each pin assembly in the **Qty** column of the **Pin Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. Threaded and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 premate PCB tail standard contact to be installed in contact position #10, write "Q" in circle #10.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Catalog 6-1773444-7
Revised 10-07

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-1106-0803

South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: +44-(0) 800-267-666

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Selection Menu

Part Number	Description	Check One
1648183-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Pin Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	1766811-1	Crimp	
	B =	1766819-1	Probe Proof, crimp	
	C =	1766230-1	1/4-20 Internal Thread	
	D =	1766274-1	M6 x 1 Internal Thread	
	E =	1766269-1	Probe Proof, 1/4-20 Internal Thread	
	F =	1766275-1	Probe Proof, M6 x 1 Internal Thread	
	G =	1766268-1	1/4-20 External Thread	
	H =	1766231-1	M6 x 1 External Thread	
	J =	1766270-1	Probe Proof, 1/4-20 External Thread	
	K =	1766276-1	Probe Proof, M6 x 1 External Thread	
#20	L =	1650155-1	Crimp, standard	
	M =	1650161-1	Crimp, premate	
	N =	1650162-2	Crimp, postmate	
	P =	1650283-1	PCB tail, standard	
	Q =	1650065-1	PCB tail, premate	
	R =	1650226-1	PCB tail, postmate	
#16	S =	1766194-1	Crimp, standard	
	T =	1766198-1	Crimp, premate	
	U =	1766199-1	Crimp, postmate	
	V =	1766222-1	PCB tail, standard	
	W =	1766223-1	PCB tail, premate	
	X =	1766818-1	PCB tail, postmate	
#12	Y =	1766193-1	Crimp, standard	
	Z =	1766195-1	Crimp, premate	
	AA =	1766196-1	Crimp, postmate	
	AB =	1766245-1	PCB tail, standard	
	AC =	1766250-1	PCB tail, premate	
	AD =	1766249-1	PCB tail, postmate	
#12 Hot Plug	AE =	1650153-2	Crimp, standard, Hot Plug	
	AF =	1650156-2	Crimp, premate, Hot Plug	
	AG =	1650060-2	PCB tail, standard, Hot Plug	
	AH =	1650074-3	PCB tail, premate, Hot Plug	

Crimp and Threaded contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw

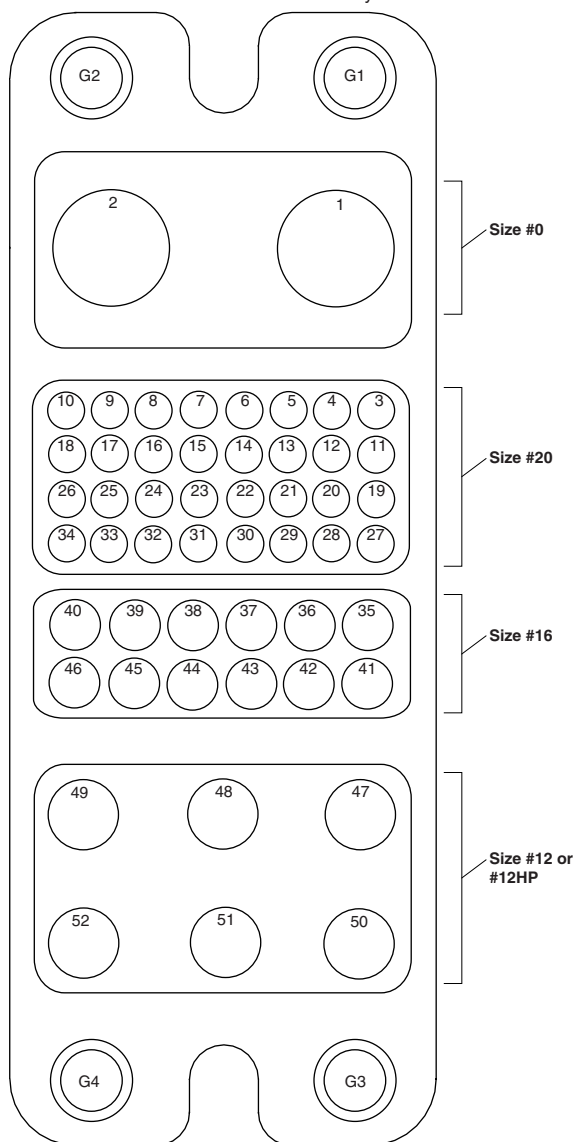
Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

Top Drawer Connector Socket Side Layout Form

Socket Assembly

- Choose one housing from the **Socket Housing Selection Menu** table. Place an X in the appropriate guide pin circles, if guide pins are required.
- Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. Threaded, Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #51, write "U" in circle #51.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Selection Menu

Part Number	Description	Check One
1648186-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	6648405-1	Crimp	
	B =	6648418-1	Probe Proof, crimp	
	C =	6648416-1	1/4-20 Internal Thread	
	D =	6648428-1	M6 x 1 Internal Thread	
	E =	6648419-1	Probe Proof, 1/4-20 Internal Thread	
	F =	6648429-1	Probe Proof, M6 x 1 Internal Thread	
	G =	6648417-1	1/4-20 External Thread	
	H =	6648430-1	M6 x 1 External Thread	
	J =	6648420-1	Probe Proof, 1/4-20 External Thread	
	K =	6648431-1	Probe Proof, M6 x 1 External Thread	
#20	L =	1648325-1	Crimp	
	M =	6648301-1	Compliant Press-fit	
	N =	1648382-1	PCB Tail	
#16	P =	6648319-1	Crimp	
	Q =	6648306-1	Compliant Press-fit	
	R =	6648383-1	PCB Tail	
#12	S =	6648318-1	Crimp	
	T =	6648304-1	Compliant Press-fit	
	U =	6648374-1	PCB Tail	
#12 Hot Plug	V =	1648384-1	Crimp, Hot Plug	
	W =	6648305-1	Compliant Press-fit, Hot Plug	
	X =	1648387-1	PCB Tail, Hot Plug	

Crimp and Threaded contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

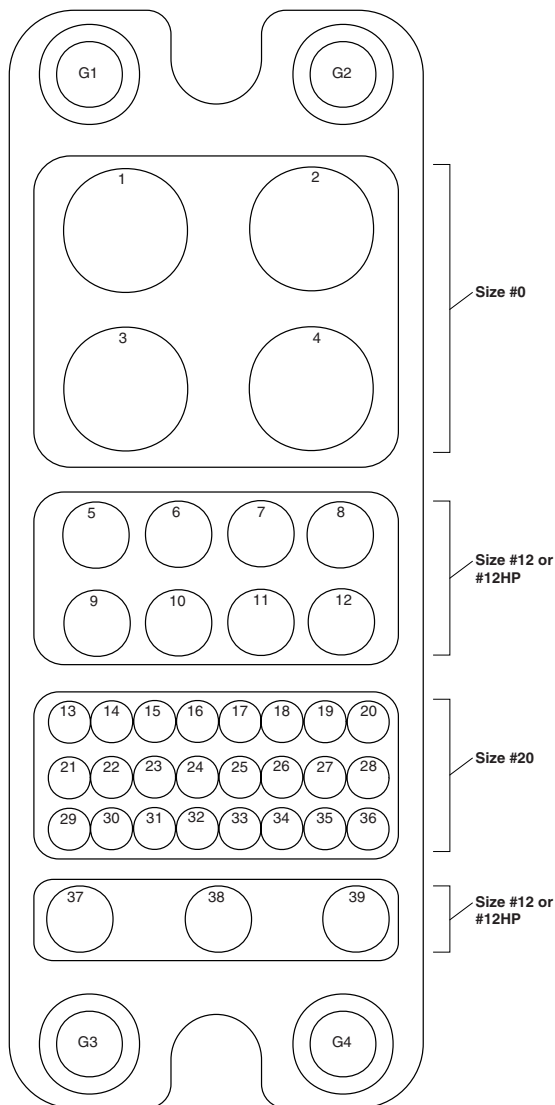
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Double Drawer Connector Pin Side Layout Form

Pin Assembly

1. Choose one housing from the **Pin Housing Selection Menu** table. Place an X in the appropriate guide pin circles, if guide pins are required.
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 premate PCB tail contact to be installed in contact position #13, write "Q" in circle #13.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Selection Menu			Check One
Part Number	Description		
1648552-1	Housing without guides		
	Housing with guides (#6-32 thread)		
	Housing with guides (M3 x 0.5 thread)		

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	1766811-1	Crimp	
	B =	1766819-1	Probe Proof, crimp	
	C =	1766230-1	1/4-20 Internal Thread	
	D =	1766274-1	M6 x 1 Internal Thread	
	E =	1766269-1	Probe Proof, 1/4-20 Internal Thread	
	F =	1766275-1	Probe Proof, M6 x 1 Internal Thread	
	G =	1766268-1	1/4-20 External Thread	
	H =	1766231-1	M6 x 1 External Thread	
	J =	1766270-1	Probe Proof, 1/4-20 External Thread	
	K =	1766276-1	Probe Proof, M6 x 1 External Thread	
#20	L =	1650155-1	Crimp, standard	
	M =	1650161-1	Crimp, premate	
	N =	1650162-2	Crimp, postmate	
	P =	1650283-1	PCB tail, standard	
	Q =	1650065-1	PCB tail, premate	
	R =	1650226-1	PCB tail, postmate	
#12	S =	1766193-1	Crimp, standard	
	T =	1766195-1	Crimp, premate	
	U =	1766196-1	Crimp, postmate	
	V =	1766245-1	PCB tail, standard	
	W =	1766250-1	PCB tail, premate	
	X =	1766249-1	PCB tail, postmate	
#12 Hot Plug	Y =	1650153-2	Crimp, standard, Hot Plug	
	Z =	1650156-2	Crimp, premate, Hot Plug	
	AA =	1650060-2	PCB tail, standard, Hot Plug	
	AB =	1650074-3	PCB tail, premate, Hot Plug	

Crimp and Threaded contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw			Qty.
Part Number	Description		
1650399-1	Screw, No 10-32 UNC 2A		
1650401-1	Screw, M5 x 0.8		

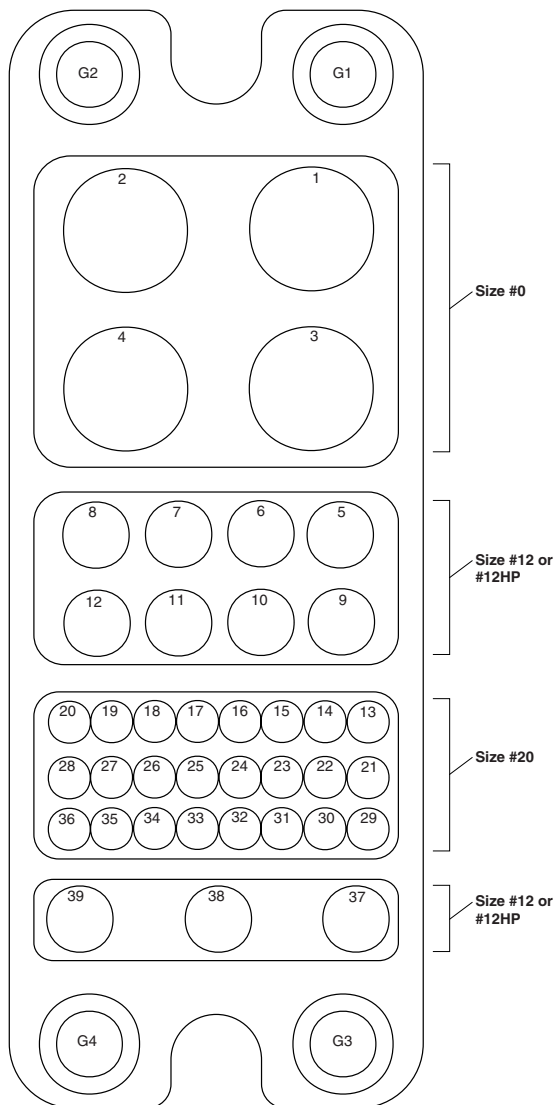
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Double Drawer Connector Socket Side Layout Form

Socket Assembly

- Choose one housing from the **Socket Housing Selection Menu** table. Place an X in the appropriate guide pin circles, if guide pins are required.
- Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. Threaded, Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #8, write "R" in circle #8.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Selection Menu

Part Number	Description	Check One
1648578-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	6648405-1	Crimp	
	B =	6648418-1	Probe Proof, crimp	
	C =	6648416-1	1/4-20 Internal Thread	
	D =	6648428-1	M6 x 1 Internal Thread	
	E =	6648419-1	Probe Proof, 1/4-20 Internal Thread	
	F =	6648429-1	Probe Proof, M6 x 1 Internal Thread	
	G =	6648417-1	1/4-20 External Thread	
	H =	6648430-1	M6 x 1 External Thread	
	J =	6648420-1	Probe Proof, 1/4-20 External Thread	
	K =	6648431-1	Probe Proof, M6 x 1 External Thread	
	L =	1648325-1	Crimp	
#20	M =	6648301-1	Compliant Press-fit	
	N =	1648382-1	PCB Tail	
	P =	6648318-1	Crimp	
#12	Q =	6648304-1	Compliant Press-fit	
	R =	6648374-1	PCB Tail	
	S =	1648384-1	Crimp, Hot Plug	
#12 Hot Plug	T =	6648305-1	Compliant Press-fit, Hot Plug	
	U =	1648387-1	PCB Tail, Hot Plug	

Crimp and Threaded contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

DualPower Drawer Connector Pin Side Layout Form

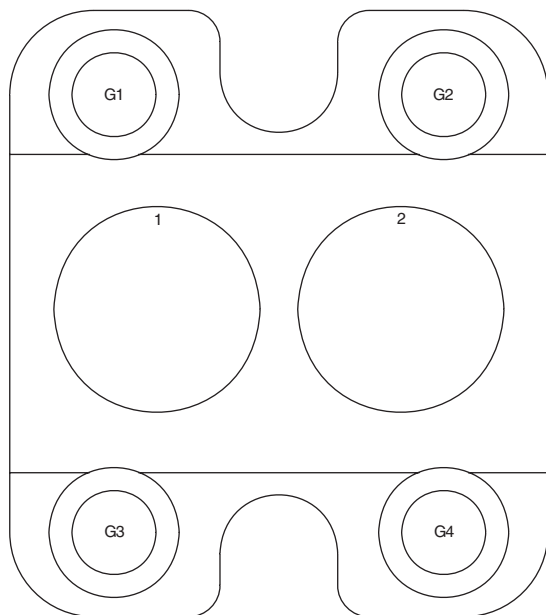
Pin Assembly

1. Choose one housing from the **Pin Housing Selection Menu** table. Place an X in the appropriate guide pin circles, if guide pins are required.
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #0 1/4-20 external thread contact to be installed in contact position #1, write "G" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

Pin Housing Selection Menu		Check One
Part Number	Description	
1648549-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	1766811-1	Crimp	
	B =	1766819-1	Probe Proof, crimp	
	C =	1766230-1	1/4-20 Internal Thread	
	D =	1766274-1	M6 x 1 Internal Thread	
	E =	1766269-1	Probe Proof, 1/4-20 Internal Thread	
	F =	1766275-1	Probe Proof, M6 x 1 Internal Thread	
	G =	1766268-1	1/4-20 External Thread	
	H =	1766231-1	M6 x 1 External Thread	
	J =	1766270-1	Probe Proof, 1/4-20 External Thread	
	K =	1766276-1	Probe Proof, M6 x 1 External Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

DualPower Drawer Connector Socket Side Layout Form

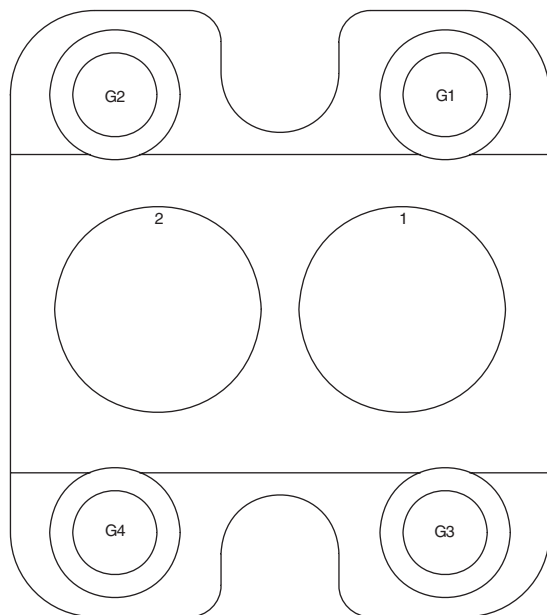
Socket Assembly

- Choose one housing from the **Socket Housing Selection Menu** table.
Place an X in the appropriate guide pin circles, if guide pins are required.
- Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #0 1/4-20 external thread contact to be installed in contact position #1, write "G" in circle #1.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

Socket Housing Selection Menu		Check One
Part Number	Description	
1648575-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Socket Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	6648405-1	Crimp	
	B =	6648418-1	Probe Proof, crimp	
	C =	6648416-1	1/4-20 Internal Thread	
	D =	6648428-1	M6 x 1 Internal Thread	
	E =	6648419-1	Probe Proof, 1/4-20 Internal Thread	
	F =	6648429-1	Probe Proof, M6 x 1 Internal Thread	
	G =	6648417-1	1/4-20 External Thread	
	H =	6648430-1	M6 x 1 External Thread	
	J =	6648420-1	Probe Proof, 1/4-20 External Thread	
	K =	6648431-1	Probe Proof, M6 x 1 External Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

QuadPower Drawer Connector Pin Side Layout Form

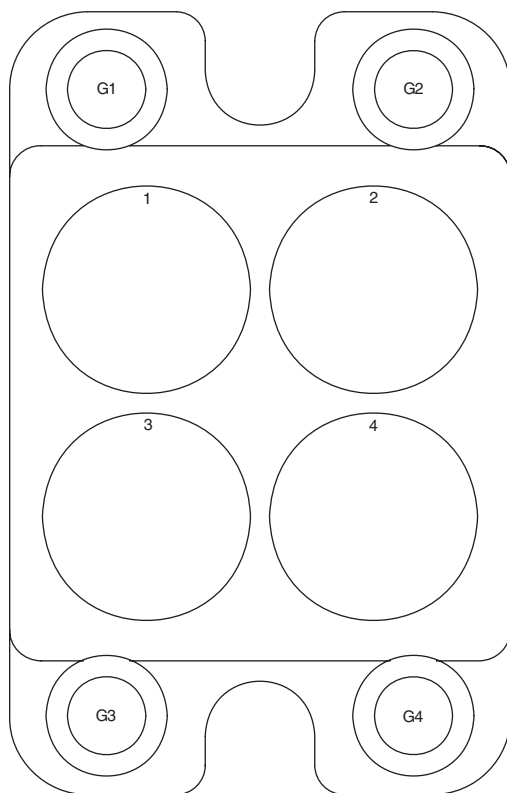
Pin Assembly

1. Choose one housing from the **Pin Housing Selection Menu** table. Place an X in the appropriate guide pin circles, if guide pins are required.
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #0 1/4-20 external thread contact to be installed in contact position #1, write "G" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

Pin Housing Selection Menu		Check One
Part Number	Description	
1648548-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	1766811-1	Crimp	
	B =	1766819-1	Probe Proof, crimp	
	C =	1766230-1	1/4-20 Internal Thread	
	D =	1766274-1	M6 x 1 Internal Thread	
	E =	1766269-1	Probe Proof, 1/4-20 Internal Thread	
	F =	1766275-1	Probe Proof, M6 x 1 Internal Thread	
	G =	1766268-1	1/4-20 External Thread	
	H =	1766231-1	M6 x 1 External Thread	
	J =	1766270-1	Probe Proof, 1/4-20 External Thread	
	K =	1766276-1	Probe Proof, M6 x 1 External Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

QuadPower Drawer Connector Socket Side Layout Form

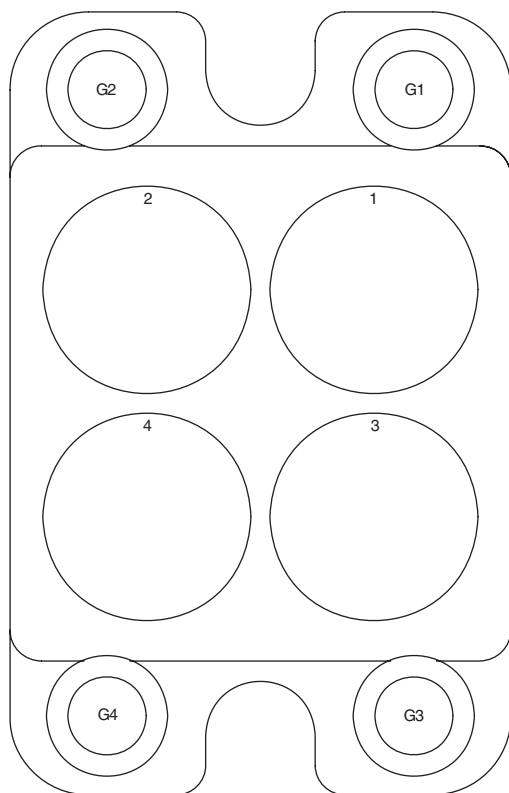
Socket Assembly

- Choose one housing from the **Socket Housing Selection Menu** table.
Place an X in the appropriate guide pin circles, if guide pins are required.
- Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
- Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #0 1/4-20 external thread contact to be installed in contact position #1, write "G" in circle #1.
- Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

Socket Housing Selection Menu		Check One
Part Number	Description	
1648574-1	Housing without guides	
	Housing with guides (#6-32 thread)	
	Housing with guides (M3 x 0.5 thread)	

Socket Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	6648405-1	Crimp	
	B =	6648418-1	Probe Proof, crimp	
	C =	6648416-1	1/4-20 Internal Thread	
	D =	6648428-1	M6 x 1 Internal Thread	
	E =	6648419-1	Probe Proof, 1/4-20 Internal Thread	
	F =	6648429-1	Probe Proof, M6 x 1 Internal Thread	
	G =	6648417-1	1/4-20 External Thread	
	H =	6648430-1	M6 x 1 External Thread	
	J =	6648420-1	Probe Proof, 1/4-20 External Thread	
	K =	6648431-1	Probe Proof, M6 x 1 External Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

In-Line QuadPower Drawer Connector Pin Side Layout Form

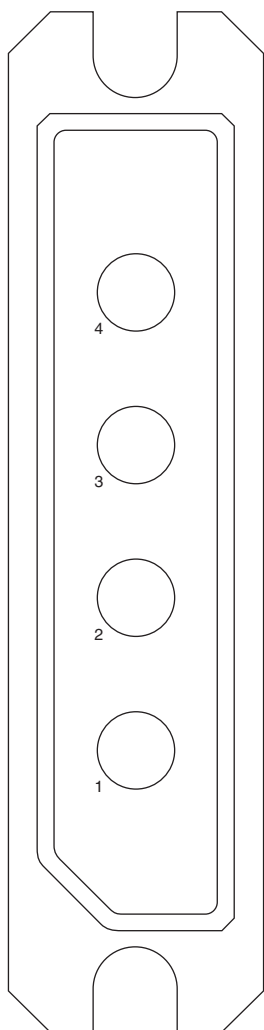
Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #0 M6 x 1 external thread contact to be installed in contact position #1, write "H" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Pin Housing Part Number
1651493-1

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A =	1766811-1	Crimp	
	B =	1766819-1	Probe Proof, crimp	
	C =	1766230-1	1/4-20 Internal Thread	
	D =	1766274-1	M6 x 1 Internal Thread	
	E =	1766269-1	Probe Proof, 1/4-20 Internal Thread	
	F =	1766275-1	Probe Proof, M6 x 1 Internal Thread	
	G =	1766268-1	1/4-20 External Thread	
	H =	1766231-1	M6 x 1 External Thread	
	J =	1766270-1	Probe Proof, 1/4-20 External Thread	
	K =	1766276-1	Probe Proof, M6 x 1 External Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

**Top Assembly Part Number
Assigned by Tyco Electronics**

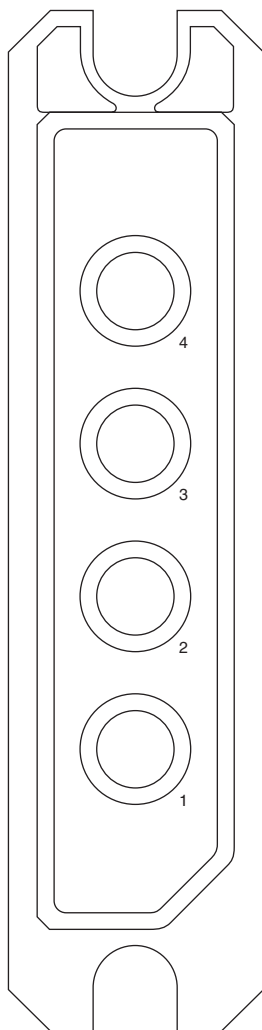
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

In-Line QuadPower Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #0 M6 x 1 external thread contact to be installed in contact position #1, write "H" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

1651404-1

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#0	A	= 6648405-1	Crimp	
	B	= 6648418-1	Probe Proof, crimp	
	C	= 6648416-1	1/4-20 Internal Thread	
	D	= 6648428-1	M6 x 1 Internal Thread	
	E	= 6648419-1	Probe Proof, 1/4-20 Internal Thread	
	F	= 6648429-1	Probe Proof, M6 x 1 Internal Thread	
	G	= 6648417-1	1/4-20 External Thread	
	H	= 6648430-1	M6 x 1 External Thread	
	J	= 6648420-1	Probe Proof, 1/4-20 External Thread	
	K	= 6648431-1	Probe Proof, M6 x 1 External Thread	

Contacts are removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650399-1	Screw, No 10-32 UNC 2A	
1650401-1	Screw, M5 x 0.8	

Top Assembly Part Number
Assigned by Tyco Electronics

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

W5 Power Drawer Connector Pin Side Layout Form

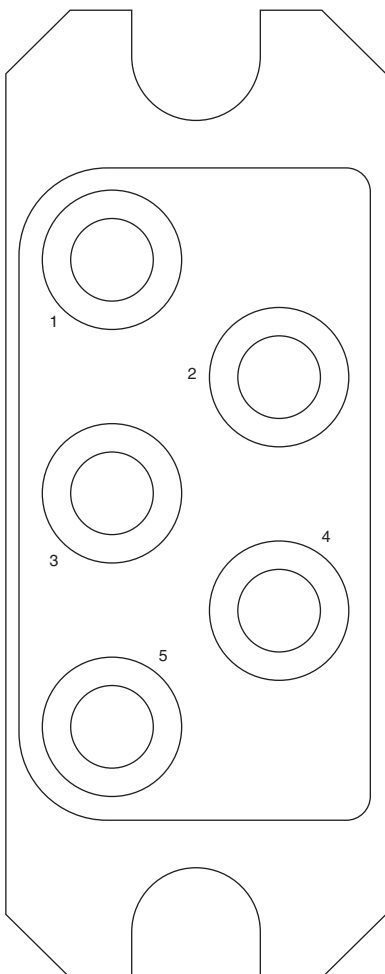
Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #4 1/4-20 external thread contact to be installed in contact position #1, write "B" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Pin Housing Part Number
6651457-1

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#4	A =	1766232-1	Crimp, standard	
	B =	1766812-1	1/4-20 External Thread	
	C =	1766283-1	M5 Internal Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

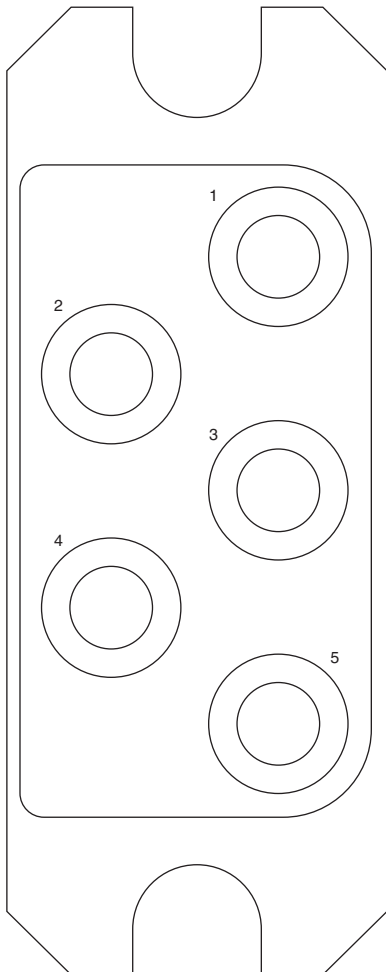
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

W5 Power Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Threaded contacts are installed by Tyco Electronics; enter the letter reference of the desired threaded contact in the appropriate contact positions on the drawing: e.g., if you need a size #4 1/2-20 external thread contact to be installed in contact position #1, write "B" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number
6651458-1

Socket Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#4	A =	6648434-1	Crimp, standard	
	B =	6648435-1	1/4-20 External Thread	
	C =	6648335-1	M5 Internal Thread	

Contacts are removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

HV8P Drawer Connector Pin Side Layout Form

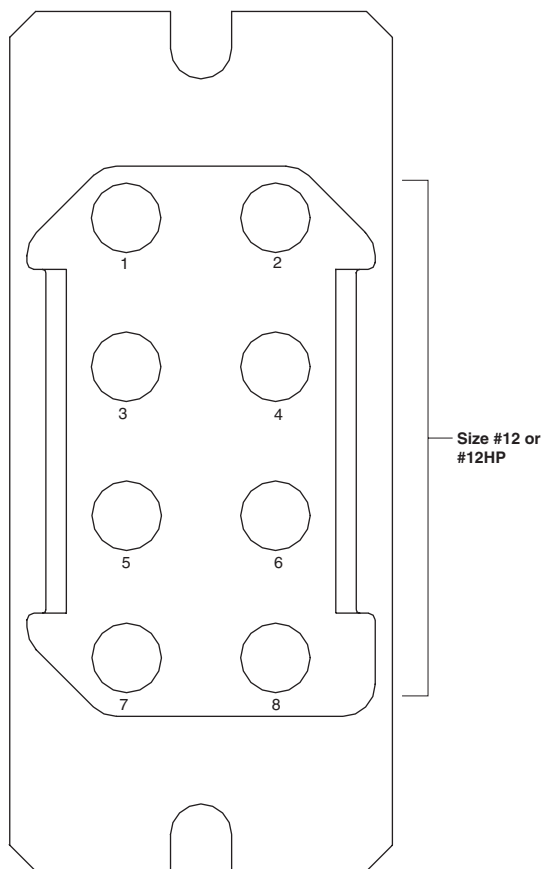
Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 premate PCB tail contact to be installed in contact position #8, write "E" in circle #8.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



Pin Housing Part Number

1648127-1 = Fixed Mount

Pin Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#12	A =	1766193-1	Crimp, standard	
	B =	1766195-1	Crimp, premate	
	C =	1766196-1	Crimp, postmate	
	D =	1766245-1	PCB tail, standard	
	E =	1766250-1	PCB tail, premate	
	F =	1766249-1	PCB tail, postmate	
#12 Hot Plug	G =	1650153-2	Crimp, standard, Hot Plug	
	H =	1650156-2	Crimp, premate, Hot Plug	
	J =	1650060-2	PCB tail, standard, Hot Plug	
	K =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Top Assembly Part Number
Assigned by Tyco Electronics

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

HV8P Drawer Connector Socket Side Layout Form

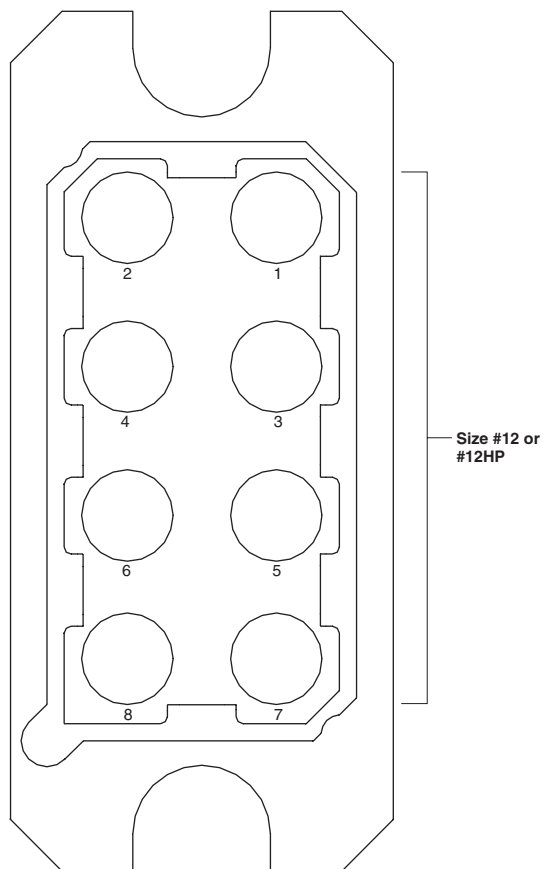
Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #8, write "C" in circle #8.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



Socket Housing Part Number

1648128-1 = Float Mount

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#12	A =	6648318-1	Crimp	
	B =	6648304-1	Compliant Press-fit	
	C =	6648374-1	PCB Tail	
#12 Hot Plug	D =	1648384-1	Crimp, Hot Plug	
	E =	6648305-1	Compliant Press-fit, Hot Plug	
	F =	1648387-1	PCB Tail, Hot Plug	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

Top Assembly Part Number
Assigned by Tyco Electronics

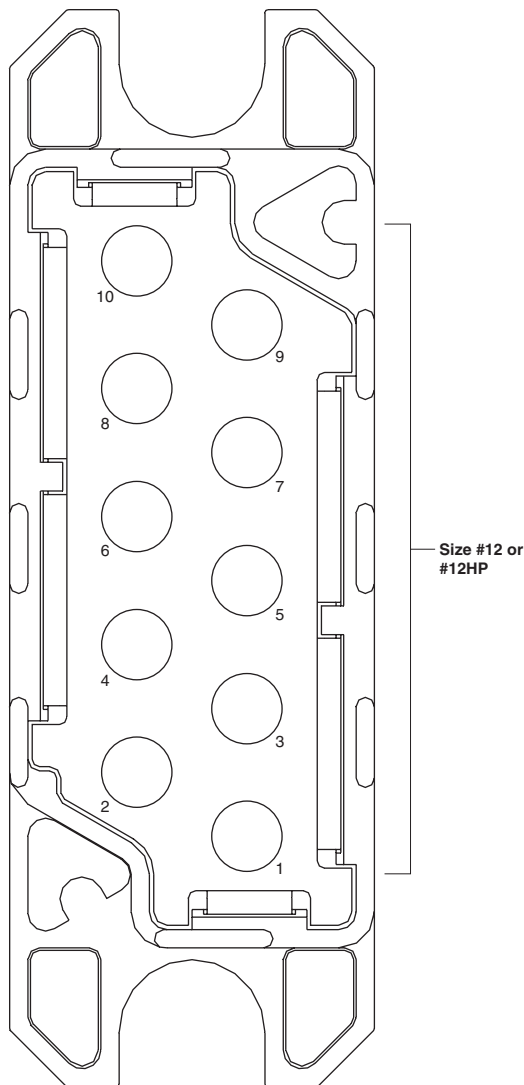
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

P10S0 Drawer Connector Pin Side Layout Form

Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a hot plug size #12 premate PCB tail contact to be installed in contact position #10, write "K" in circle #10.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Part Number
1648568-1

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#12	A =	1766193-1	Crimp, standard	
	B =	1766195-1	Crimp, premate	
	C =	1766196-1	Crimp, postmate	
	D =	1766245-1	PCB tail, standard	
	E =	1766250-1	PCB tail, premate	
	F =	1766249-1	PCB tail, postmate	
#12 Hot Plug	G =	1650153-2	Crimp, standard, Hot Plug	
	H =	1650156-2	Crimp, premate, Hot Plug	
	J =	1650060-2	PCB tail, standard, Hot Plug	
	K =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

**Top Assembly Part Number
Assigned by Tyco Electronics**

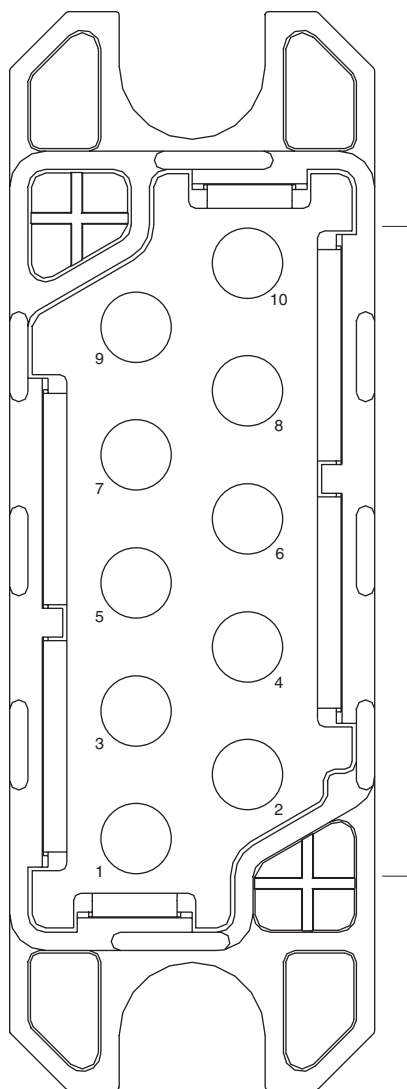
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

P10S0 Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a hot plug size #12 PCB tail contact to be installed in contact position #10, write "F" in circle #10.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

1648596-1

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#12	A =	6648318-1	Crimp	
	B =	6648304-1	Compliant Press-fit	
	C =	6648374-1	PCB Tail	
#12 Hot Plug	D =	1648384-1	Crimp, Hot Plug	
	E =	6648305-1	Compliant Press-fit, Hot Plug	
	F =	1648387-1	PCB Tail, Hot Plug	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

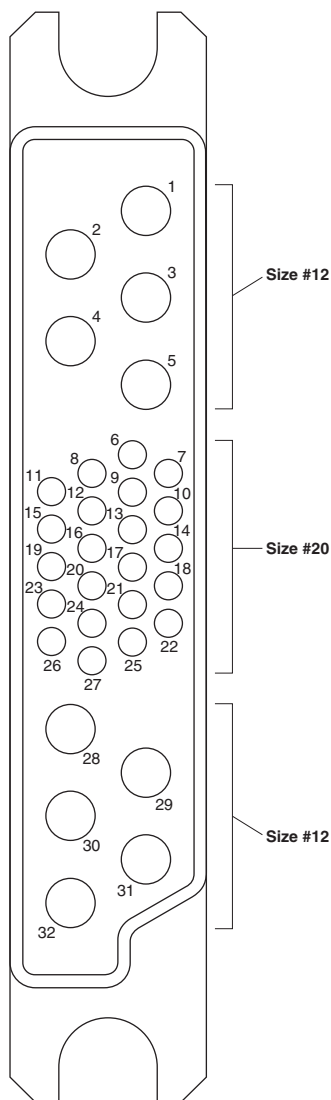
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

P10S22 Drawer Connector Pin Side Layout Form

Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 standard PCB tail contact to be installed in contact position #1, write "K" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION	
Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Part Number
1648211-1

Pin Contact Selection Menu				
Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1650155-1	Crimp, standard	
	B =	1650161-1	Crimp, premate	
	C =	1650162-2	Crimp, postmate	
	D =	1650283-1	PCB tail, standard	
	E =	1650065-1	PCB tail, premate	
	F =	1650226-1	PCB tail, postmate	
#12	G =	1766193-1	Crimp, standard	
	H =	1766195-1	Crimp, premate	
	J =	1766196-1	Crimp, postmate	
	K =	1766245-1	PCB tail, standard	
	L =	1766250-1	PCB tail, premate	
	M =	1766249-1	PCB tail, postmate	
#12 Hot Plug	N =	1650153-2	Crimp, standard, Hot Plug	
	P =	1650156-2	Crimp, premate, Hot Plug	
	Q =	1650060-2	PCB tail, standard, Hot Plug	
	R =	1650074-3	PCB tail, premate, Hot Plug	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw		
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

Top Assembly Part Number
Assigned by Tyco Electronics

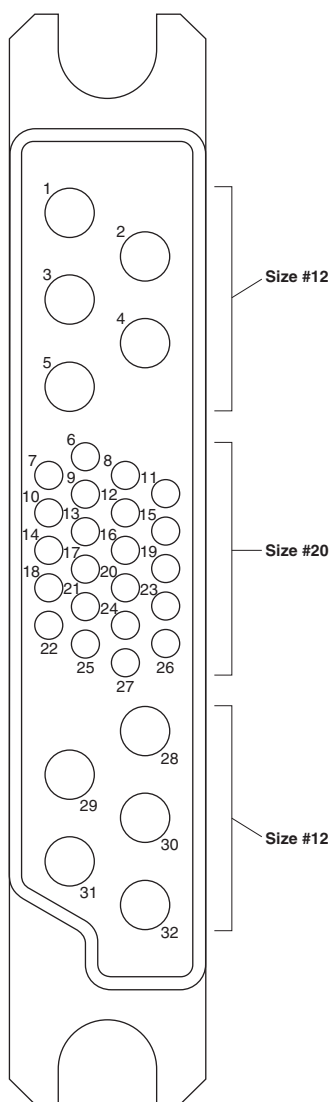
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

P10S22 Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a non-hot plug size #12 PCB tail contact to be installed in contact position #1, write "F" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

1648212-1

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1648325-1	Crimp	
	B =	6648301-1	Compliant Press-fit	
	C =	1648382-1	PCB Tail	
#12	D =	6648318-1	Crimp	
	E =	6648304-1	Compliant Press-fit	
	F =	6648374-1	PCB Tail	
#12 Hot Plug	G =	1648384-1	Crimp, Hot Plug	
	H =	6648305-1	Compliant Press-fit, Hot Plug	
	J =	1648387-1	PCB Tail, Hot Plug	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

Top Assembly Part Number
Assigned by Tyco Electronics

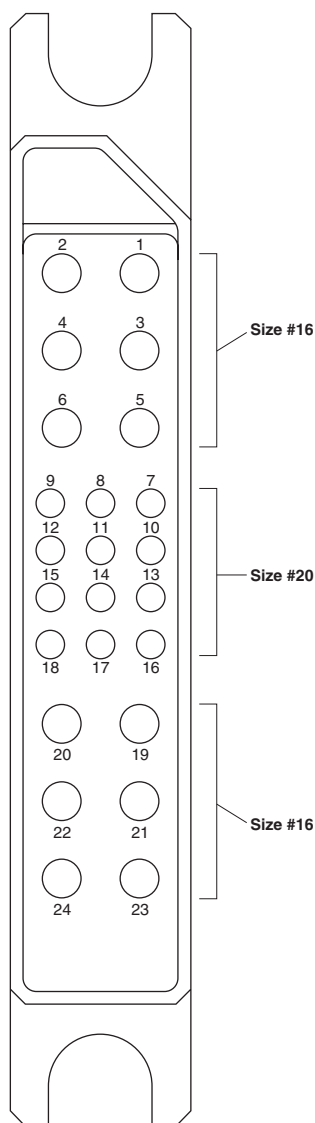
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

P12S12 Drawer Connector Pin Side Layout Form

Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 premate PCB tail contact to be installed in contact position #9, write "E" in circle #9.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Part Number

1651202-1

Pin Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1650155-1	Crimp, standard	
	B =	1650161-1	Crimp, premate	
	C =	1650162-2	Crimp, postmate	
	D =	1650283-1	PCB tail, standard	
	E =	1650065-1	PCB tail, premate	
	F =	1650226-1	PCB tail, postmate	
#16	G =	1766194-1	Crimp, standard	
	H =	1766198-1	Crimp, premate	
	J =	1766199-1	Crimp, postmate	
	K =	1766222-1	PCB tail, standard	
	L =	1766223-1	PCB tail, premate	
	M =	1766818-1	PCB tail, postmate	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

Top Assembly Part Number
Assigned by Tyco Electronics

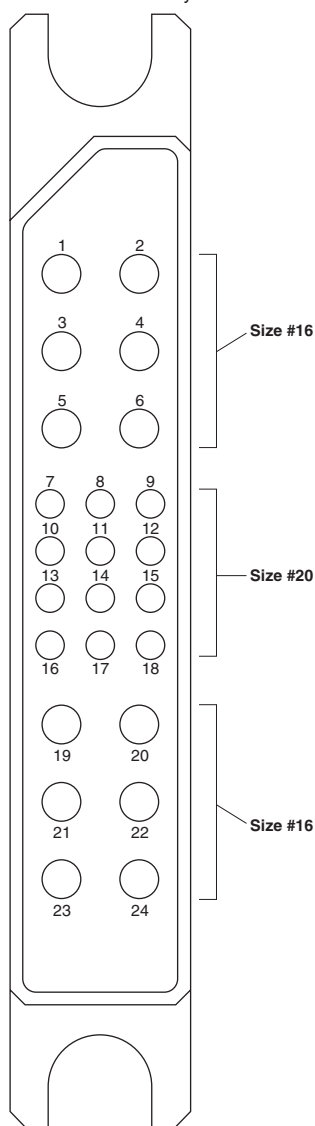
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

P12S12 Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 PCB tail contact to be installed in contact position #9, write "C" in circle #9.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

1651203-1

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1648325-1	Crimp	
	B =	6648301-1	Compliant Press-fit	
	C =	1648382-1	PCB Tail	
#16	D =	6648319-1	Crimp	
	E =	6648306-1	Compliant Press-fit	
	F =	6648383-1	PCB Tail	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

Top Assembly Part Number
Assigned by Tyco Electronics

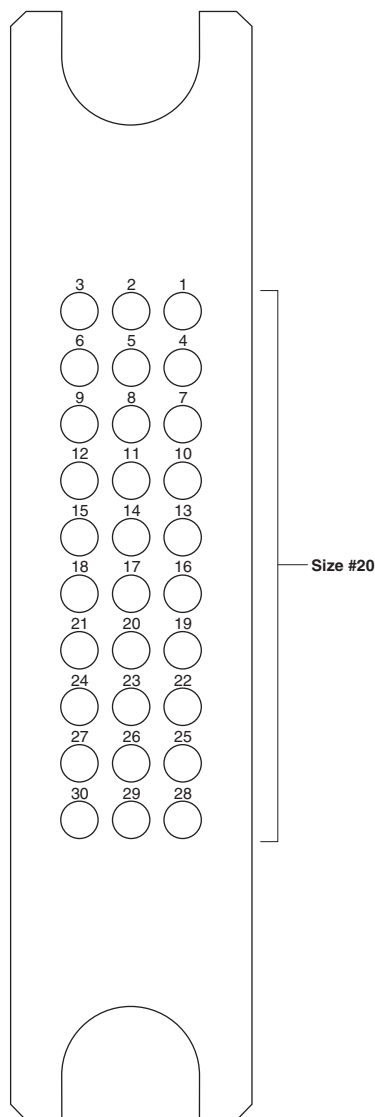
AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

POS30 Drawer Connector Pin Side Layout Form

Pin Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each pin contact you require **for each pin assembly** in the **Qty** column of the **Pin Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 premate PCB tail contact to be installed in contact position #1, write "E" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Pin Connector (Rear Face)
Pin Contact Insertion Side
Pin Connector Rear Face Cavity Identification



**Top Assembly Part Number
Assigned by Tyco Electronics**

ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Pin Housing Part Number

6651204-1

Pin Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1650155-1	Crimp, standard	
	B =	1650161-1	Crimp, premate	
	C =	1650162-2	Crimp, postmate	
	D =	1650283-1	PCB tail, standard	
	E =	1650065-1	PCB tail, premate	
	F =	1650226-1	PCB tail, postmate	

Crimp contacts are removable. PCB tail contacts are non-removable.

Float Mount Shoulder Screw

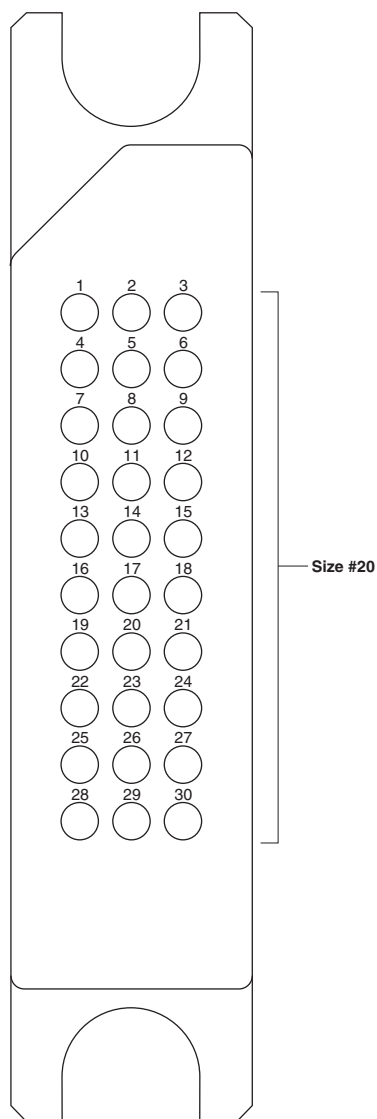
Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

POS30 Drawer Connector Socket Side Layout Form

Socket Assembly

1. Enter company and contact information (at right).
2. Write the total quantity of each socket contact you require **for each socket assembly** in the **Qty** column of the **Socket Contact Selection Menu** table.
3. Crimp contacts are shipped uninstalled. Press-fit and PCB tail contacts are installed by Tyco Electronics; enter the letter reference of the desired contact in the appropriate contact positions on the drawing: e.g., if you need a size #20 PCB tail contact to be installed in contact position #1, write "C" in circle #1.
4. Sign, date and send the completed form to your local Tyco Electronics Sales Engineer.

Socket Connector (Rear Face)
Socket Contact Insertion Side
Socket Connector Rear Face Cavity Identification



ENTER CUSTOMER INFORMATION

Company	Location
Contact Name	Title
Telephone	Fax
Email Address	
I am: ☐ End user ☐ Contract manufacturer (end user: _____)	
Signature	Today's Date
	Annual Quantity Required

Submit to your local Tyco Electronics Sales Engineer.

Socket Housing Part Number

6651205-1

Socket Contact Selection Menu

Size	Ref.	Part Number	Termination Style & Pin Length	Qty.
#20	A =	1648325-1	Crimp	
	B =	6648301-1	Compliant Press-fit	
	C =	1648382-1	PCB Tail	

Crimp contacts are removable. Press-fit and PCB tail contacts are non-removable.

Float Mount Shoulder Screw

Part Number	Description	Qty.
1650402-1	Screw, No 8-32 UNC 2A	
1650589-1	Screw, M4 x 0.7	

Top Assembly Part Number
Assigned by Tyco Electronics

AMP, ELCON, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Tyco Electronics Corporation
Harrisburg, PA

tycoelectronics.com

6-1773444-7-LUG-PDF-10-07

